Service Information

Built-in Oven 6M
AKZM 654/IX

8525 654 53001
Last Modification: 04/09/11
Creation Date: 04/08/11

Spare Part List 2

Exploded View 3

Technical Data 4

Dimensional Sketch 5

Wiring Diagram 6

Error Codes 8

Configuration Description 9

Testprogram 11

Configuration code 12

Service Bulletin 4812 715 40368 13

Service Bulletin 4812 715 40381 16

Service Bulletin 4812 715 40374 20

This document is only intended for qualified technicans who are aware of the respective safety regulations.
Subject to modifications

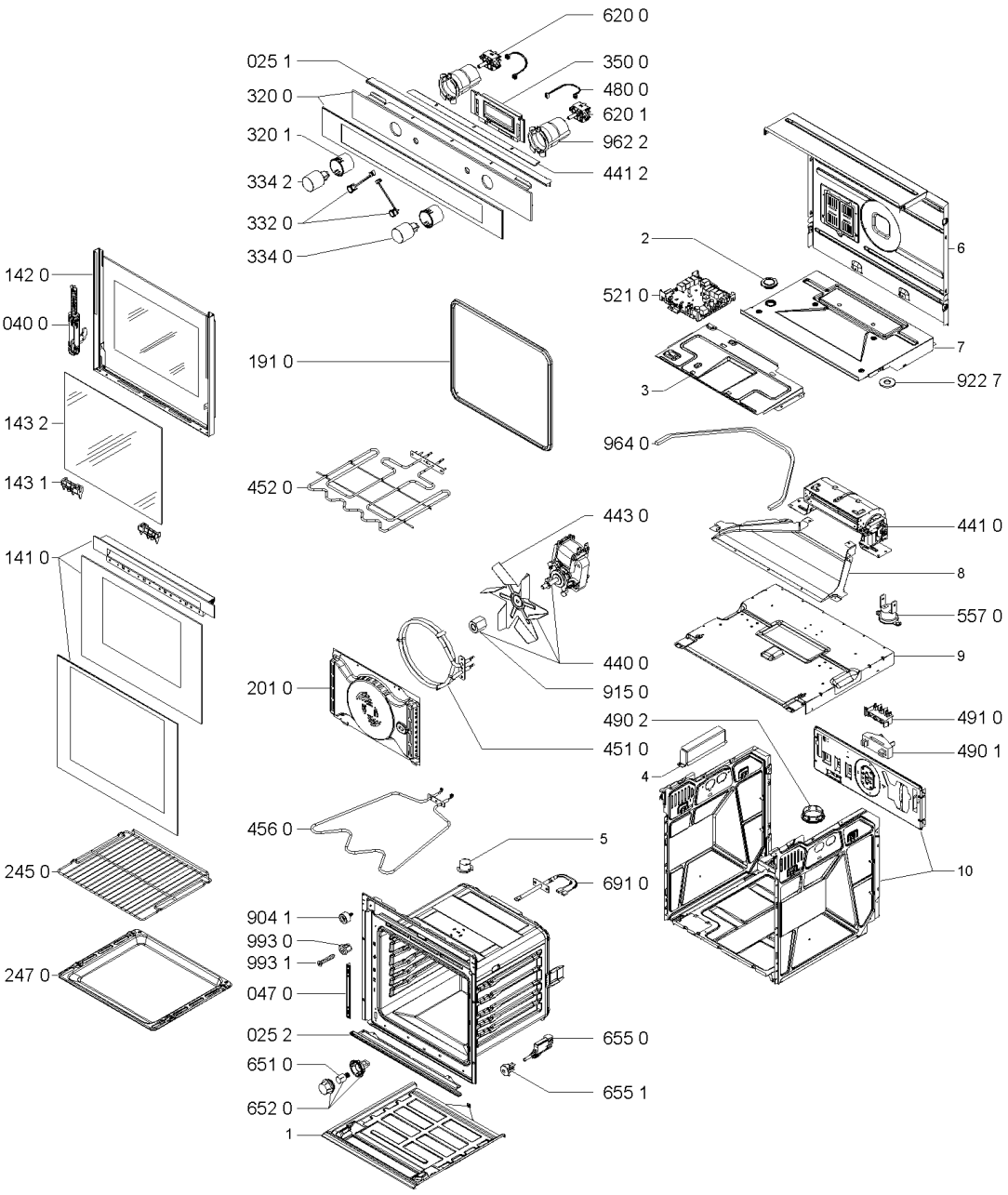
© Whirlpool EMEA

Spare Part List

Pos	12NC	Description
0251	**4801 211 01152**	Profile
0252	**4801 211 01163**	Trim lower
0400	**4801 211 02892**	Hinge
0470	**4801 211 01154**	Hinge running mechanism
1410	**4801 211 02899**	Oven glass assembly
1420	**4801 211 03172**	Door glass inner
1431	**4812 404 78858**	Support glass
1432	**4801 211 01173**	Glass intermediate
1910	**4801 211 01444**	Gasket door
2010	**4801 211 01155**	Rear panel enamelled
2450	**4801 211 01183**	Oven shelf
2470	**4801 211 03007**	Fat pan enamelled
3200	**4801 211 01188**	Glass panel + frame
3201	**4801 211 01165**	Ring push-push
3320	**4801 211 01169**	Push button
3340	**4801 211 01153**	Knob push-push
3342	**4801 211 01187**	Knob oven
3500	**4801 211 01189**	Display G2EVO analogue
4400	**4812 361 18492**	Motor fan
4410	**4801 211 01162**	Air cooling fan
4412	**4801 211 01151**	Gasket water leakage
4430	**4819 515 48065**	Fan 6-blades
4510	**4801 211 01186**	Heating element circular 2000W
4520	**4801 211 03613**	Heating element upper/grill 2450W
4560	**4801 211 01147**	Heating element lower 1150W
4800	**4801 211 01172**	Cable harness selector switch-display
4901	**4812 290 68255**	Clamp cable
4902	**4812 321 48026**	Cap feed through
4910	**4812 290 68329**	Connection block
5210	**4801 211 03539**	Control unit Antares
5570	**4801 211 01181**	Thermostat 155°C
6200	**4801 211 01145**	Oven switch 11 position
6201	**4801 211 01146**	Selector switch +/- incremental
6510	**4810 103 91431**	Lamp halogen 40W
6520	**4801 211 01148**	Lamp halogen 40W cpl (bulb 481010391431)
6550	**4801 211 01182**	Switch door assembly
6551	**4801 211 01177**	Screwed joint door switch
6910	**4801 211 01179**	Probe oven temperature
9041	**4801 211 04065**	Damper oven door
9150	**4819 505 18145**	Nut
9227	**4819 532 28281**	Rosette
9622	**4801 211 01167**	Support push-push
9640	**4801 211 02934**	Gasket
9930	**4801 211 01185**	Spacer oven
9931	**4801 211 04721**	Kit

© Whirlpool EMEA

Exploded View



0000 003 71395

Technical Data

Electrical base data

Rated voltage	230-240 V~
Main connection	230-240 V 1N~50 Hz

Power Consumption

Total connected load	2700 W
Upper heating element/Grill	2450 W
Forced air	2000 W
Lower heating element	1150 W
Booster	2700 W

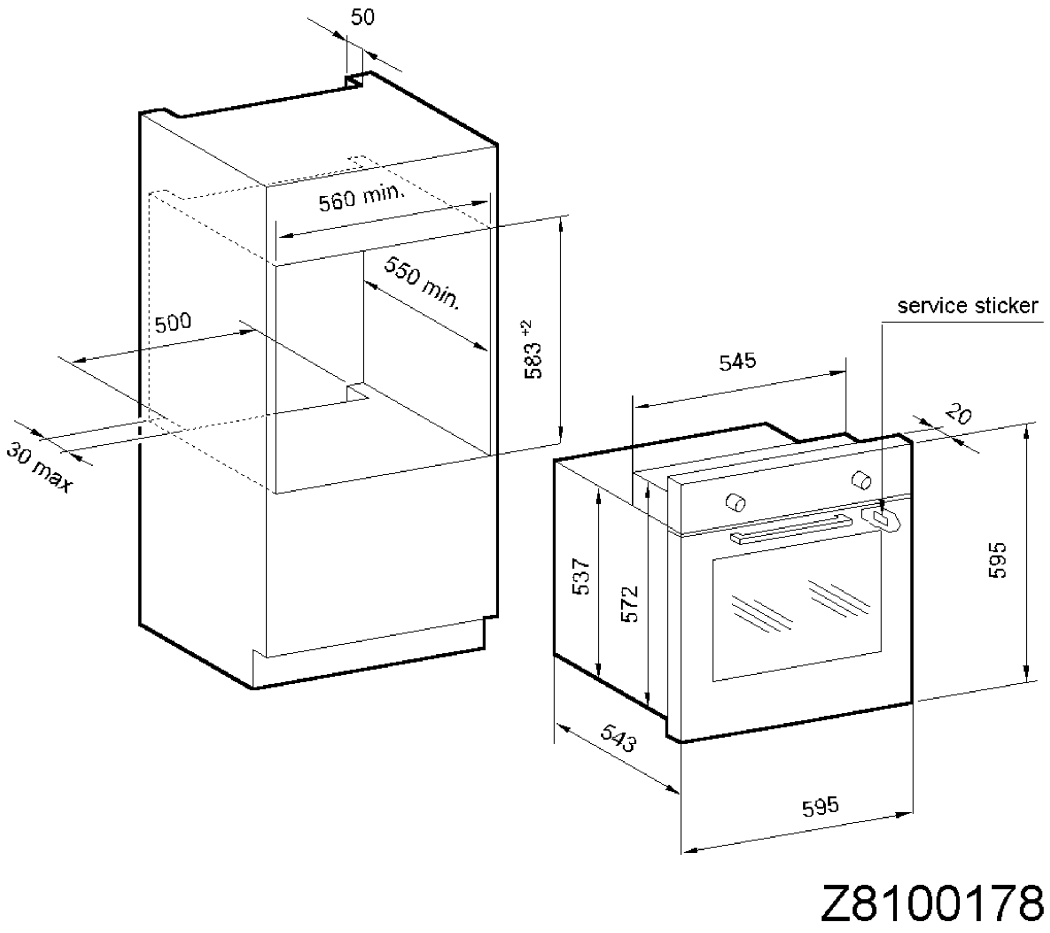
Electrical components

Auto timer	G2 EVO

Accessories

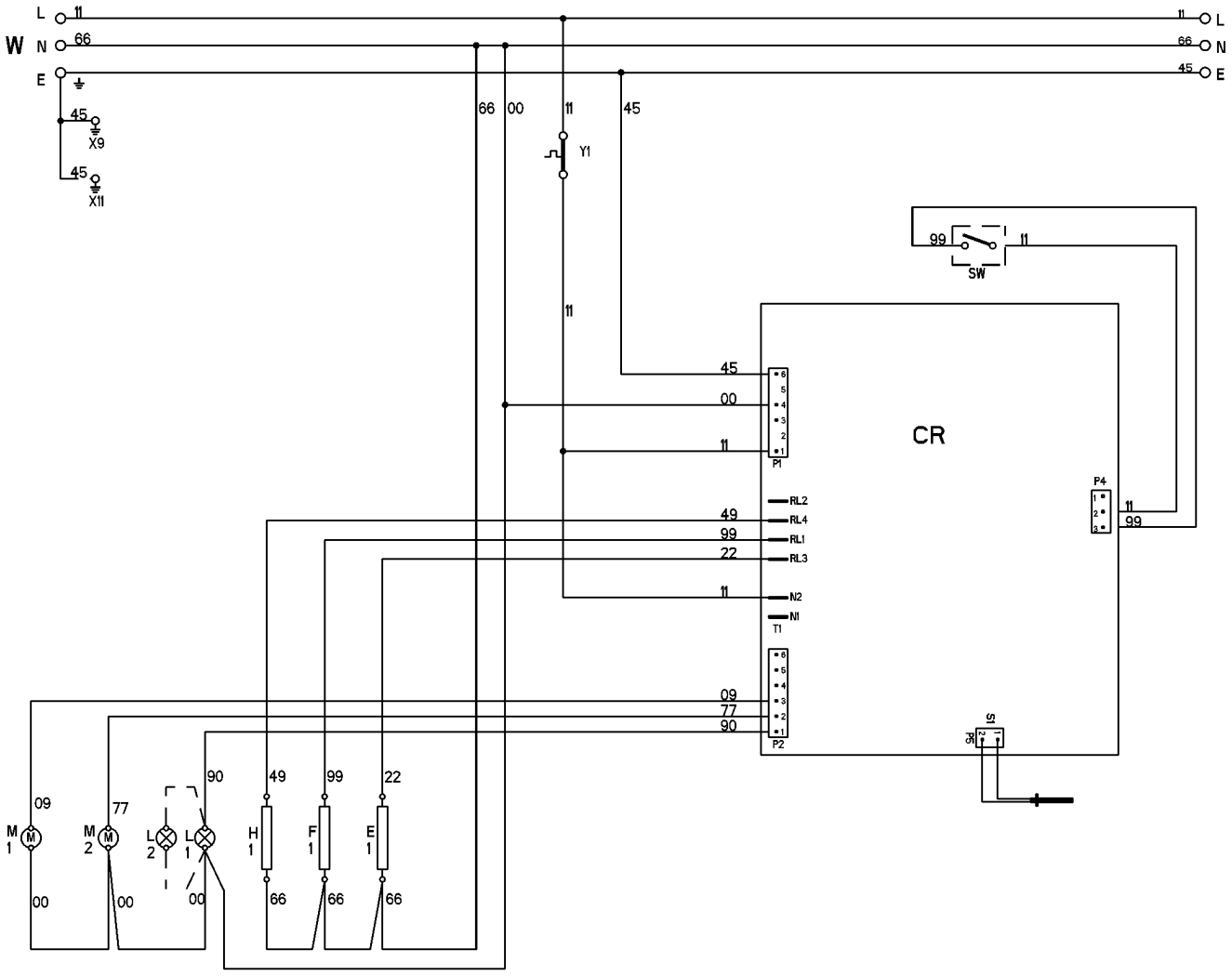
Fat pan enameled	452.5 x 375 mm
Grid chrome	452.5 x 369.2 mm

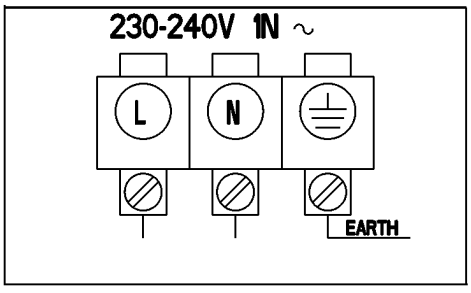
Dimensional Sketch



Z8100178

Wiring Diagram





4619 619 09581

Legend

CR	ELECTRONIC OVEN CONTROL UNIT
E1	UPPER HEATING ELEMENT
F1	CIRCULAR HEATING ELEMENT
H1	LOWER HEATING ELEMENT
L1	OVEN LAMP
L2	LATERAL OVEN LAMP
M1	OVEN FAN
M2	COOLING FAN
S	ELECTRONIC SENSOR
SW	DOOR SWITCH
Y1	THERMOLIMITER
W	MAINS TERMINAL BLOCK
X3	EARTH ELECTRONIC CONTROL UNIT
X9	EARTH UPPER HEATING ELEMENT
X11	EARTH LATERAL OVEN LAMP

00	BLACK
11	BROWN
22	RED
33	ORANGE
44	YELLOW
55	GREEN
66	BLUE
77	VIOLET
88	BLUE-SKY
99	WHITE
09	WHITE-BLACK
29	WHITE-RED
45	YELLOW-GREEN
49	WHITE-YELLOW
69	WHITE-BLUE
90	GREY
92	PINK

61909581en

Error Codes

Failure Code	Failure Type	Suggested Repair Action
F01	Probe	Temperature Probe error. First check probe connection, if ok disconnect the probe and measure its resistance (1000Ω+3.75*Temp ambient). If value is in range change AM.
F02	Temperature	Temperature error. Check heating elements insulation (disconnect the heating element and check each terminal for continuity to GROUND). If there is no continuity change AM. If there is continuity change heating element.
F03	EEPROM	EEPROM error. Check with the manual configuration menu that the oven is correctly configured and the test bit is set to ON. Wait 10 minutes. If F03 appears again, change AM.
F04	WIDE	WIDE communication error. First check the connection on P007 of AM. If it is OK check the connection of the WIRE that start from AM P007 to the UI board. If it is ok connect a new UI and check if the appliance works properly. If not change the AM.
F05	Latch (Pyro version only)	Latch error. First unplug the appliance, wait at least 10sec then reconnect. Verify that latch system repositioning works correctly (door has to be closed, motor has to run). If this happens, check the connection between AM and door latch system. If it is ok check micro switch functionality (door switch open if the door is open and latch switch open if the door is unlocked). If switches are ok then change AM.
F06	Door (Pyro version only)	Door error. First check connection between AM and door latch system. If it is ok check door switch functionality (open circuit if the door is open, closed circuit if the door is closed). If switch is ok then change AM.
F07	Cooking parameter data set error	Data set error. If the problem persists change AM.
F08	UI EEPROM error	User Interface EEPROM error. Change UI (Navigator or Atlas).
F09	UI SPI memory error	UI SPI memory error. Change UI (Navigator or Atlas).
F10	Function knob error	The value read is not allowed for the selected knob. First check connection between UI (dummy or smart) and the knob. If it is ok, check that the oven is correctly configured using the manual configuration menu. If the problem persists change the knob encoder. If the problem still persists change the AM.
F11	6^{TH} sense error	6^{TH} sense error, Voltage error or Current error. Verify power supply voltage is 230±10% If supply is within tolerances, change AM.
F18	Zero crossing error	Not foreseen.
F20	FPGA error (only ATLAS)	Change UI.
F21	HMI input error (only ATLAS)	Change UI.

81003105en

Configuration Description

Manual Configuration Procedure

- ✓ To be done at appliance manager (AM) / user interface (UI) exchange
- ✓ To access the manual configuration menu, the function knob have to be positioned to the 0 (off) position
- ✓ Configuration numbers are on the rating plate – XX/XX : respectively the UI/AM numbers, if UI is 00, you do not need to configure the User Interface.
- ✓ The configuration menu can be accessed only within the first minute after the oven is plugged in.

At the end of the procedure don't forget to set the TEST BIT to ON, if it's not done, the oven will show the F03 error message after a few minutes.

G2Evo User Interface (with one or two buttons)

Within the first minute after plug in:

1) Press the OK button for 5 seconds → a long "beep" is played;
2) Press the OK button 4 times (must be pressed in 5 seconds) → display shows "CONF" and the configuration number

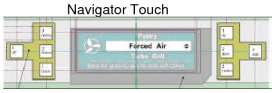
3) Press the OK button for 3 seconds to enter the edit mode → configuration code blinks
4) Turn the temp. knob to select the configuration code → confirm it by pressing OK for 3 seconds
5) Turn clockwise the function knob until you reach the TEST string→you'll see one of these strings

6) Press OK for 3 seconds → TEST BIT status blinks
7) Turn the temp. knob to set the TEST BIT to ON → press OK for 3 seconds
8) Finished, to exit the configuration menu, turn the function knob clockwise to 0 (off)

81003106en

Navigator and Atlas User Interface

Navigator Touch



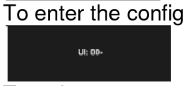
Navigator Knobs

Atlas (Flagship)

Within the first minute after plug in:

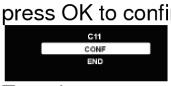
1) Press the OK and << buttons for 5 seconds → a long “beep” is played;
2) Press the OK button 4 times (must be pressed in 5 seconds) → display shows “CONF”

3) To enter the configuration menu, press the OK → UI:xx is shown



4) Turn the temperature knob (up/down arrow buttons if touch) to select the UI configuration and press OK to confirm → AM:xx is shown

5) Turn the temperature knob (up/down arrow buttons if touch) to select the AM configuration and press OK to confirm → CONF menu is shown again



6) Turn the temperature knob (up/down arrow buttons if touch) and go to the TESTED BIT

7) Press OK to enter edit mode

8) Turn the temperature knob (up/down arrow buttons if touch) to select the “TESTED BIT: ON” string and press the << (back) button to confirm → menu is shown again

9) Turn the temperature knob (up/down arrow buttons if touch) and go to END string, press OK to exit the manual configuration menu

81003106en

Testprogram

DEMO MODE for MINERVA ELECTRONIC OVENS

G2EVO Display

Functionality: In this state the user interface shows a sequence of screen that represent the oven features. All the electric loads (heaters) are switched OFF. The only loads that are managed like as during the normal behavior of the oven are the lamp, and the cooling fan.

Procedure: the procedure to enter in Demo mode is:
With the function knob on 0 (off)
Within the first minute from oven plug in:

1. OPEN the door
2. Keeping the DOOR OPEN, press BACK button for 5 seconds

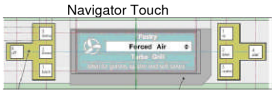
At this point the display starts the screen sequence described here below.
In Demo mode the user interface inputs have no impact on the oven; the UI shows the screen related to the position like in normal functions with the difference that the loads are not switched ON. Only the lamp is switched ON if the position if the function knob required it ON or if the door is open.
After 2 minutes of no interaction between the customer and the OVEN the screen sequence starts again and the LAMP is switched OFF.

NOTE: DEMO mode must be set within 1 minute after the power ON. It is not possible set the DEMO mode after 1 minute from the power ON.
Power OFF will not delete the Demo mode. Once the DEMO mode is activated it will be maintained at the next power ON. In order to deactivate the DEMO mode the same procedure to enter has to be executed.

On the oven versions with only one button, to exit the DEMO MODE, you need to enter into the MANUAL CONFIGURATION menu, exiting the MANUAL CONFIGURATION menu, also the DEMO MODE will be cancelled.

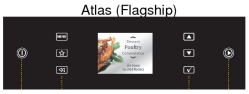
Navigator / Atlas (Flagship) Display

Navigator Touch



Navigator Knobs

Atlas (Flagship)



Functionality: In this state the user interface shows a sequence of screen that represent the oven features. As an alternative the buttons can be operated as normal, but all the electric loads (heaters) are switched OFF. The only loads that are managed like as during the normal behavior of the oven are the lamps, and the cooling fan.

Procedure: the procedure to enter in Demo mode is:
With the function knob on 0 (off)
Within the first minute from oven plug in:

1. OPEN the door
2. Keeping the DOOR OPEN, press BACK button for 5 seconds

Activation/deactivation is confirmed by a sound.

On power up, when demo mode is activated, system directly jumps to stand by screen by taking 12:00 as default TOD.
After two minutes of inactivity system automatically jumps to demo mode slideshow.

NOTE: DEMO mode must be set within 1 minute after the power ON. It is not possible set the DEMO mode after 1 minute from the power ON.
Power OFF will not delete the Demo mode. Once the DEMO mode is activated it will be maintained at the next power ON. In order to deactivate the DEMO mode the same procedure to enter has to be executed.

81003107en

Configuration code

..... GE00-AN01

Service Bulletin 4812 715 40368

AUTHOR: Markus Rekittke
Last Update: 05/11/11
VERSION: 1.0
TITLE: G2EVO Display switch off
SUBJECT: Power Control Board contamination due to soldering process. Measure on G2EVO contamination level with external lab shown chloride contaminants on PCB.

- Since humidity is one external factor that can accelerate the dendrites migration, testing has been performed to asses the condensation level of the final application. Some condensation has been found on the 67L platform

Appliances involved:
AKZM 651/IX 852565129010
AKZM 654/IX 852565401000
AKZM 654/IX 852565438000
AKZM 654/IX 852565438001
AKZM 654/IX 852565438002
AKZM 654/IX 852565453000
AKZM 657/IX/01 852565701000
AKZM 657/IX 852565738000
AKZM 657/IX 852565738001
AKZM 659/IX 852565929000
AKZM 659/IX 852565929001
AKZM 750/IX 852575001000
AKZM 751/IX 852575129000
AKZM 751/IX 852575129001
AKZM 751/WH 852575129010
AKZM 751/WH 852575129011
AKZM 751/NB 852575129020
AKZM 751/NB 852575129021
AKZM 752/IX 852575229000
AKZM 752/IX 852575229001
AKZM 752/WH 852575229010
AKZM 752/NB 852575229020
AKZM 752/MR 852575229030
AKZM 755/IX 852575538000
AKZM 755/IX 852575538002
AKZM 756/IX 852575638000
AKZM 756/IX 852575638002
AKZM 756/WH 852575638010
AKZM 756/WH 852575638012
AKZM 756/NB 852575638020
AKZM 756/NB 852575638022
AKZM 756/IX 852575653000
AKZM 756/WH 852575653010
AKZM 757/IX 852575738000
AKZM 757/IX 852575738001
AKZM 760/IX 852576029000
AKZM 760/WH 852576029010
AKZM 760/NB 852576029020
AKZM 760/MR 852576029030
AKZM 762/IX 852576201000
AKZM 765/IX 852576501000
AKZM 767/IX 852576729000

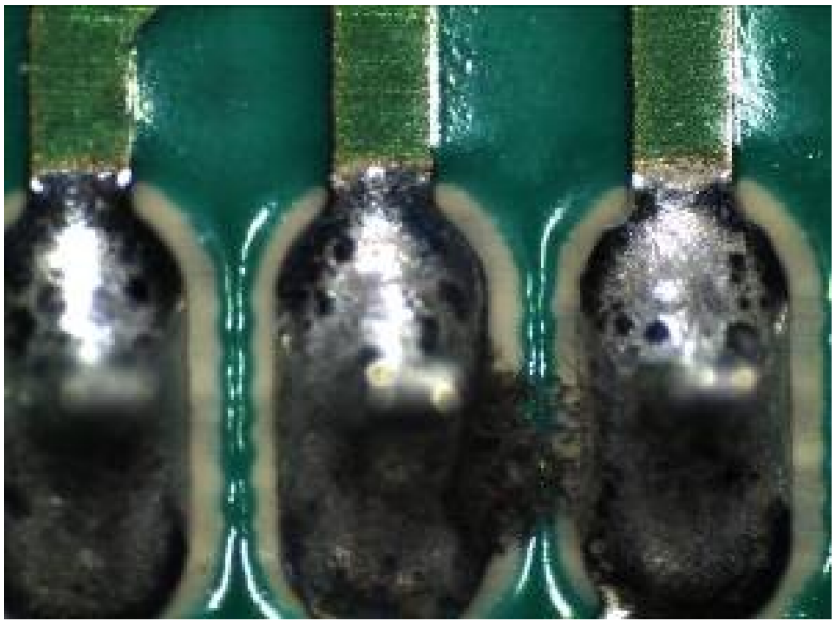
© Whirlpool EMEA

AKZM 767/WH 852576729010
AKZM 767/WH 852576729011
AKZM 767/NB 852576729020
AKZM 767/NB 852576729021
AKZM 791/IX 852579138000
AKZM 792/IX 852579229000
AKZM 792/IX 852579229001
AKZM 793/IX 852579329000
BLVE 8100/PT 855640406000
BLVE 8100/PT 855640422000
BLVE 8100/PT 855640422001
BLVE 8100/EW 855640422010
BLVE 8100/ES 855640422020
BLVE 8200/PT 855640622000
BLVE 8200/PT 855640622001
BMVE 8200/IN 855640722000
BMVE 8200/IN 855640722001
ELVE 8160/PT 855641022000
ELIE 8160/PT 855641122000
ELPE 8160 PT 855641222000
EMVE 8260/IN 855641322000
EMIE 7163/IN 855643022000
ELIE 7163/IN 855643222000
BLVE 7103/PT 855643322000
BLPE 8100 PT 855643601000
BMVE 8100/PT 855643701000
EMVD 7163/PT 855643922000
EMIE 7263/IN 855644222000
ELIE 7163/PT 855644322000
ELVD 7163/PT 855644422000
ELPE 7263/IN 855644622000
AKP 154/IX 857715429000
AKP 154/NB 857715429010
AKP 154/WH 857715429020
PCCI 812260 X 857737522000
PCCI 822260 X 857737922000
AKZ 218/IX 858521838000
AKZ 230/IX 858523029000
AKZ 230/NB 858523029010
AKZ 230/WH 858523029020
AKZ 231/IX 858523129000
AKZ 235/IX 858523515000
AKZ 236/IX 858523606000
AKZ 237/IX 858523701000
AKZ 238/IX 858523801000
AKZ 238/IX 858523801001
AKZ 239/IX 858523901000
AKZ 671/IX 858567101000
AKZ 672/IX 858567201000
AKZ 674/IX 858567401000
AKZ 675/IX 858567501000

© Whirlpool EMEA

Remedial Action:

Under Circumstances it could be happen, that on the G2EVO Display Board the Above described issue could happen.
In this case please verify on the G2EVO board the soldering connection and Exchange it.



Affected are only appliances produced before wk 02/2011.

Spc Stock exchanged with modified Boards on wk05/2001.

Service Bulletin 4812 715 40381

AUTHOR: Pasquale Lattuca
Last Update: 11/11/11
VERSION: 1.0
TITLE: Change of connectors on Ester, Antares,Joule, G2EVO boards & Display.
SUBJECT: Due to a quality improvement (secureness) from the connectors, changed production the connectors!

In case the (old) electronics (PCB & Display), will not be anymore available in SPC, is it mandatory to order also the Adapter kit.

Affected (Old) electronics:

* 480121101113
* 480121101114
* 480121103965
* 480121103433
* 480121103539
* 480121102831
* 480121103964
* 480121102826
* 480121102856
* 480121101189

REMEDIAL ACTION

In case to exchange the power board (Ester;AntaresEVO;Joule;G2EVO) or Display, please order also the

cable kit 4810 103 67333

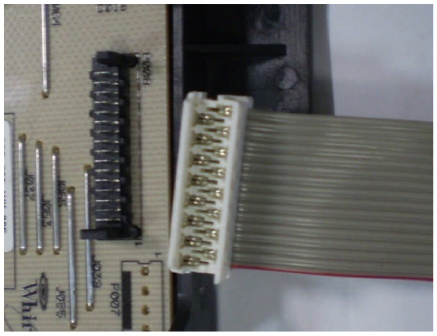
..to be able to connect old with new or new with old. (PCB <=> Display)

The estimated availability date from the cable kit in SPC,
is wk42/2011.

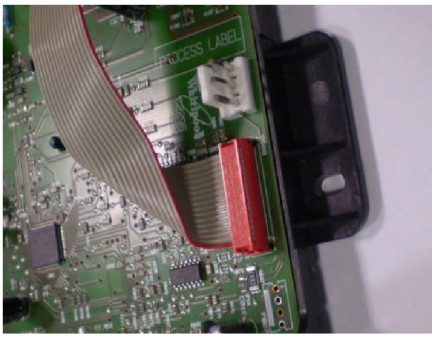
Please follow below mentioned instruction!

CONNECTOR OVERVIEW

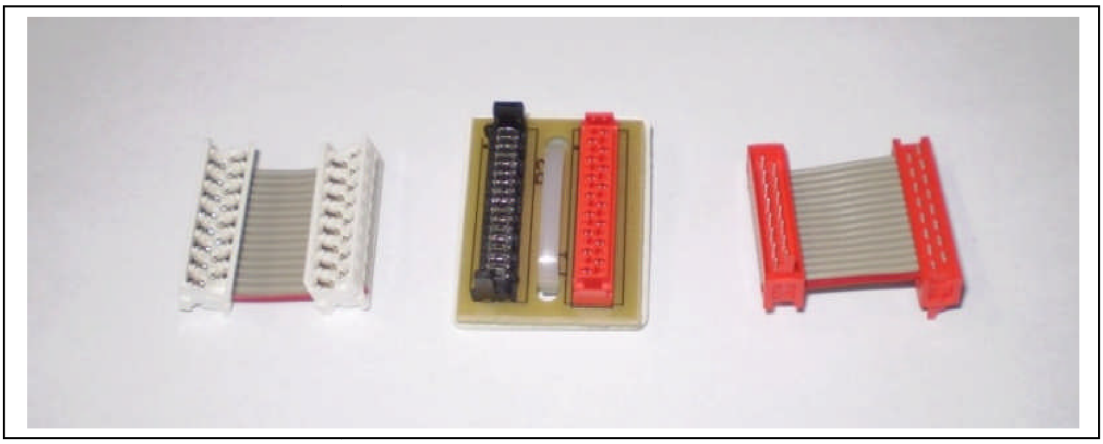
Old Connectors
(male is black, female is white)



New Connectors
(both male and female are red)



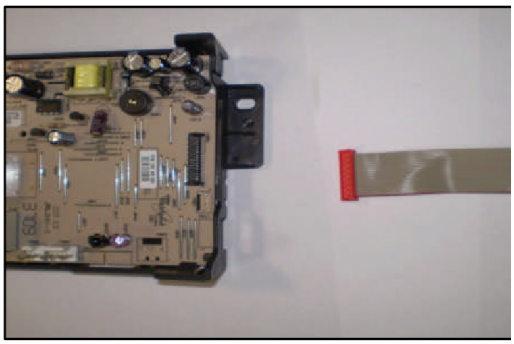
ADAPTER OVERVIEW



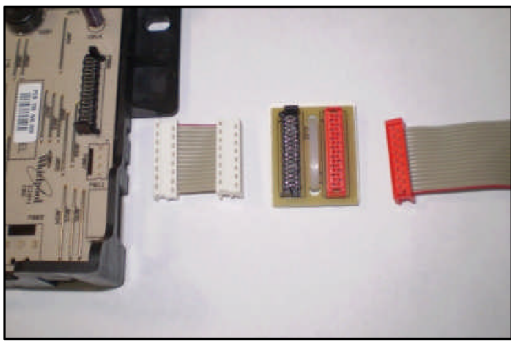
(cable kit 4810 103 67333)

Case 1: Old PCB and new Display.

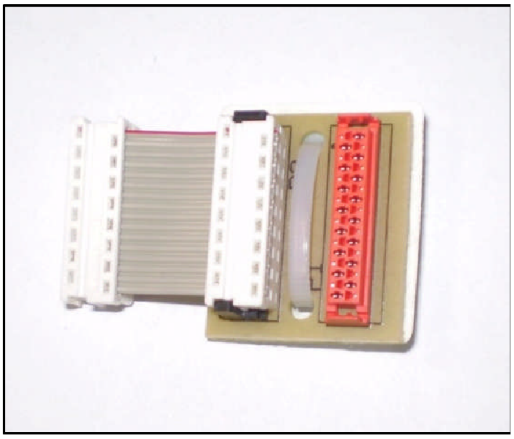
Step 1



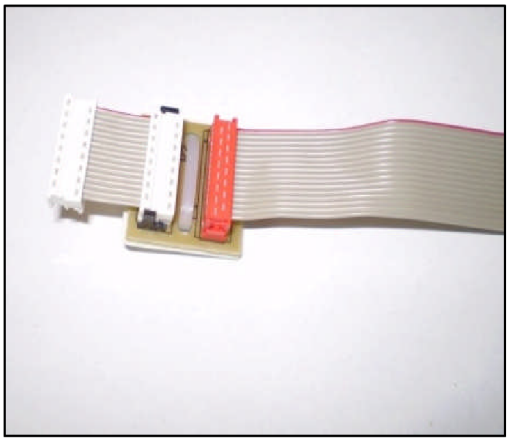
Step 2



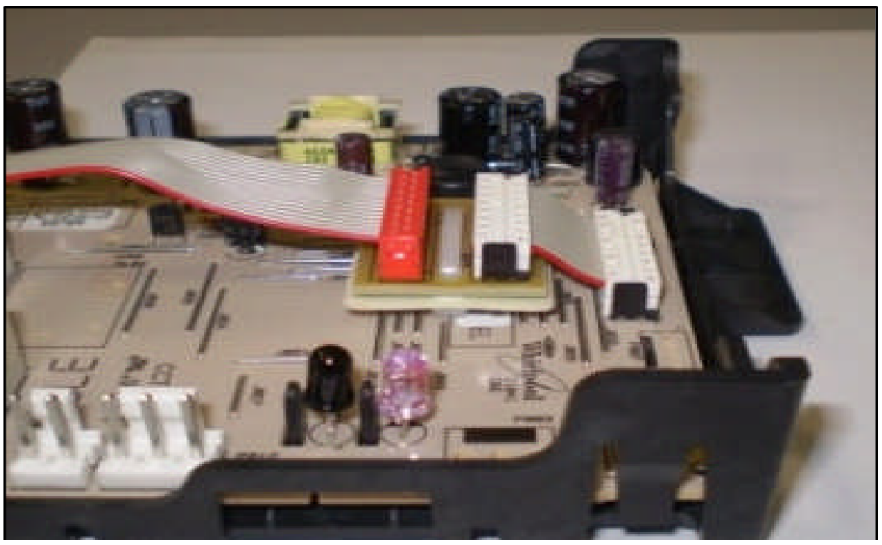
Step 3



Step 4

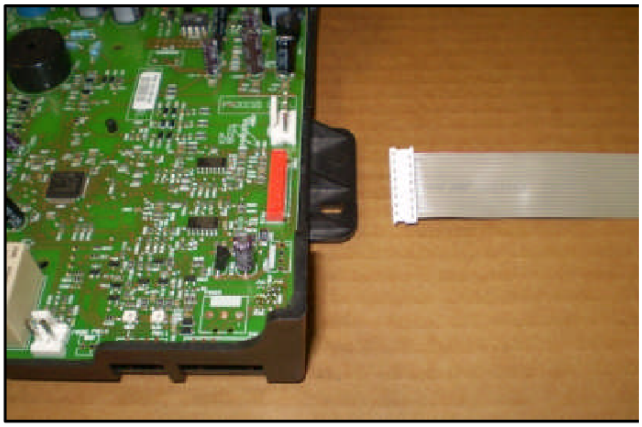


Step 5 “Connect the Adapter to the PCB”



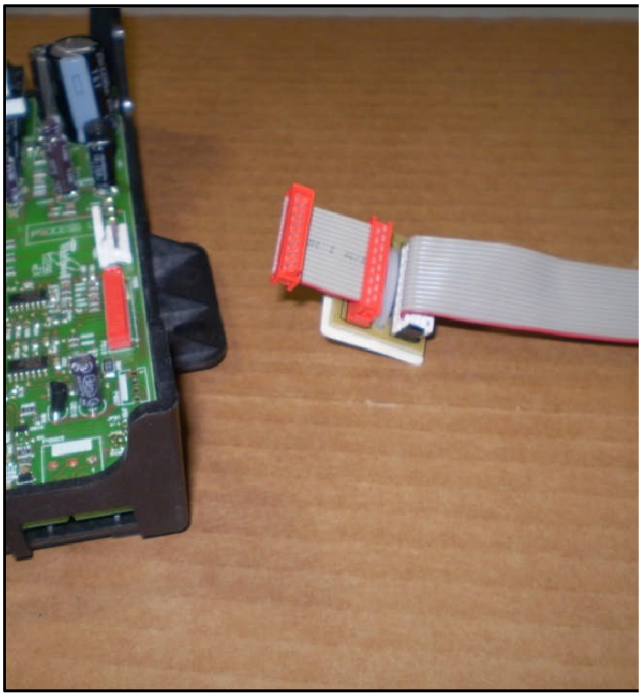
Case 2: New PCB and old Display

Step 1

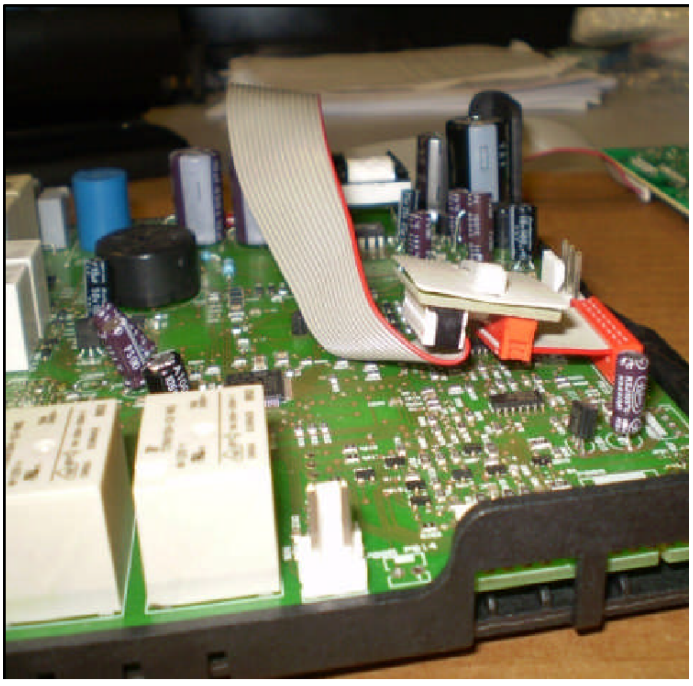


Step 2

Step 3



Step 4



Service Bulletin 4812 715 40374

AUTHOR: Pasquale Lattuca
Last Update: 09/16/11
VERSION: 1.0
TITLE: New push button ring.
SUBJECT: Due to loosing color and position on push button ring code 4801 211 01165 changed production since week21/2011 to new ring, order code 4801 211 02715.

REMEDIAL ACTION

In case of a ring exchange, please exchange all mentioned rings from the push button.

New rings, order code 4801 211 02715 on stock since end of 2009.

© Whirlpool EMEA